

REMARKS

Further and favorable reconsideration is respectfully requested in view of the foregoing amendments and the following remarks.

(I) **Disposition of Claims**

- (i) Upon entry of this amendment, Claims 1, 5, 8, 16-22, 24-25, 27, 29, 31 & 33 are pending in the application.
- (ii) No Claims have been withdrawn from consideration.
- (iii) Upon entry of this amendment, Claims 2-4, 6-7, 9, 11-15, 23, 26, 28, 30 & 32 have been canceled from the application.
- (iv) Claims 1, 5, 8, 10, 12-15, 20-22 and 24 stand rejected under 35 U.S.C. § 102.
- (v) Claims 1, 5, 10, 11, 14-19, 19-22, 24-25, 27, 29, 31 and 33 stand rejected under 35 U.S.C. § 103.

(II) **Applicants' Actions**

Claims 1, 8, 22, 25, 31 and 33 are either previously or currently amended to exclude the polymer compositions of the cited references. Support for the new amendments to Claims 1 and 22 can be found, for example, at page 5, line 19. No new matter has been added.

(III) **Claim Rejections – 35 USC § 102(e)**

Claims 1, 8, 10, 12-13 and 22 stand rejected under 35 USC §102(e) as being anticipated by U.S. Patent Appl. Pub. No. 2004/0084774 Li et al. (hereinafter "Li"). This rejection is respectfully traversed.

The Examiner admits Li discloses polynorbornene ***copolymers***.

The Claims either already (25, 33 and their dependent claims) or as currently amended (Claims 1, 22 and their dependent claims) set forth polynorbornene ***polymers*** which are made from molecular units of either formula I, or, formula I and formula II.

The ***copolymers*** of Li fall outside the scope of the amended claims, Li is not anticipatory.

The Examiner's argues that "weight loss" and "water absorption" are "mathematically" the same and the Examiner points to [0017] in this regard yet ignores [0011] of Li which states that "[u]nfortunately, polynorbornene homopolymer and copolymer do not meet this stringent industry requirement as seen in FIGS. 1 and 2." Li is referring to the 2% weight loss at 300 degrees C.

This is explicit evidence *in the reference* that contradicts the Examiner's argument that "weight loss" and "water absorption" are "mathematically" the same the context of polynorbornene homopolymer and copolymer.

Furthermore, chemical principles are applicable, not mathematical principles. There is evidence in Li that can be used to determine that the Li polymer was dried prior to heating to 300 degrees C. At [0104] Li states that samples are **"pre-dried in an oven at 180 degrees C"**.

Therefore the mass loss is likely due to residual monomer, or other impurities which have a vapor pressure less than 300 degrees C being driven off in the one hour period. The method Li refers to describes "holding" the temperature at 300 degrees C (please see, for example, Figure 1) and it is eminently clear that the **pre-dried samples have no water present** because they are pre-dried at 180 degrees C **prior to the test** in order to perform the test that Li describes.

The **copolymers** of Li fall outside the scope of the amended claims, Li is not anticipatory.

There is evidence *in the Li reference* that contradicts the Examiner's argument that "weight loss" and "water absorption" are the same.

There is evidence *in the Li reference* that proves the Li copolymer was pre-dried, and therefore there is no connection between Applicants' claimed water absorption and Li's weight loss at 300 degrees C over a one hour period.

It is respectfully submitted that the rejection should be withdrawn.

(IV) Claim Rejections – 35 USC § 102(b)

Claims 1, 5, 8, 10, and 22 stand rejected under 35 USC §102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP 10-251343 (hereinafter "JP '343"). This rejection is respectfully traversed.

The Claims either already (25, 33 and their dependent claims) or as currently amended (Claims 1, 22 and their dependent claims) set forth polynorbornene **polymers** which are made from molecular units of either formula I, or, formula I and formula II.

Contrary to the Examiner's arguments, the **claims do exclude** the structures of the cited reference.

The JP '343 repeat unit A is always present in the composition of JP '343, has two fused bi-cyclic structures, and falls outside the scope of the amended claims.

Regarding the Examiner's argument that the compositions of JP '343 are "expected to have the same physical properties" as that of the claimed invention, this is not the legal standard for inherency under §102.

Even if the claims read on JP '343, which they do not, the Examiner must establish that the claimed physical properties are "necessarily present" in all the compositions disclosed in JP '343. Making the conclusory statement that "everyone knows" this from "high school chemistry students on up" is not sufficient to meet the Examiner's initial burden.

It is respectfully submitted that the rejection should be withdrawn.

(V) Claim Rejections – 35 USC § 102(b)

The rejection of Claims 14-15 under 35 USC §102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over U.S. Patent No. 6,492,443 to Kodemura et al (hereinafter "Kodemura") has been rendered moot by their cancellation.

(VI) Claim Rejections – 35 USC § 103

Claims 1, 5, 10, 14-16, 19-22, 24 and 33 stand rejected under 35 USC §103(a) as being obvious over U.S. Patent No. 6,492,443 to Kodemura et al (hereinafter "Kodemura"). This rejection is respectfully traversed.

The Claims either already (25, 33 and their dependent claims) or as currently amended (Claims 1, 22 and their dependent claims) set forth polynorbornene polymers which are made from molecular units of either formula I, or, formula I and formula II.

The polymers of Kodemura fall outside the scope of the amended claims. Kodemura uses a ring opening polymerization and subsequent hydrogenation to make an entirely different polymer than claimed polynorbornenes as described completely in a prior paper, and thus Kodemura falls outside the scope of the amended claims.

Contrary to the Examiner's arguments, the **claims do exclude** the structures of the cited reference.

Regarding the Examiner's argument that the compositions of Kodemura are "expected to have the same physical properties" as that of the claimed invention, and that Applicants have "not provided evidence to the contrary, this is not the legal standard for inherency.

Even if the claims read on Kodemura, which they do not, the Examiner must establish that the claimed physical properties are "necessarily present" in all the compositions disclosed in Kodemura. Making the conclusory statement that "everyone knows" this from "high school chemistry students on up" is not sufficient to meet the Examiner's initial burden.

The Examiner has provided no motivation why one of ordinary skill in the art would modify Kodemura to obtain **only** the claimed polynorbornene.

It is respectfully submitted that the rejection should be withdrawn.

(VII) Claim Rejections – 35 USC § 103

Claims 16-19, 25, 27, 29, 31 and 33 stand rejected under 35 USC §103(a) as being obvious over U.S. Patent No. 6,492,443 to Kodemura et al in view of U.S. Patent No. 5,470,643 to Dorfman ("hereinafter Dorfman"). This rejection is respectfully traversed.

Dorfman does not remedy the deficiencies of Kodemura.

(VIII) Claim Rejections – 35 USC § 103

Claims 16-18, 25, 27, 29, 31 and 33 stand rejected under 35 USC §103(a) as being obvious over JP '343 in view of Dorfman. This rejection is respectfully traversed.

As discussed above JP '343 does not anticipate the composition of the amended claims. Furthermore, Claim 33 requires the claimed polynorbornene of the previously argued claims and the aforementioned arguments are incorporated herein by reference.

The Examiner has provided no motivation why one of ordinary skill in the art would modify JP '343 to obtain **only** the claimed polynorbornene.

Dorfman does not remedy the deficiencies of JP '343.

(X) Claim Rejections – 35 USC § 103

Claim 11 stands rejected under 35 USC §103(a) as being obvious over JP '343 in view of JP 04214778. This rejection is respectfully traversed.

JP 04214778 does not remedy the deficiencies of JP '343.

(XI) Claim Rejections – 35 USC § 112

The rejection of Claims 11-15 under 35 USC § 112 has been rendered motto by their cancellation.

In view of the foregoing, allowance of the above-referenced application is respectfully requested. Applicants invite the Examiner to contact the undersigned in case of questions. Please charge any unaccounted fee that may be due, to Deposit Account No. 04-1928 (E. I. du Pont de Nemours and Company).

Respectfully submitted,

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